Experienced job autonomy among maternity care professionals in the Netherlands

Hilde Perdok, RM, MSc; Doug Cronie, MA, RM, RN; Cecile van der Speld, RM, MSc; Jeroen van Dillen, MD, PhD; Ank de Jonge, RM, PhD; Marlies Rijnders, RM, PhD; Irene de Graaf, MD, PhD; François G. Schellevis, MD, PhD; Corine J. Verhoeven, RM, PhD.

- Hilde Perdok is midwife researcher at the Department of Midwifery Science, AVAG, Amsterdam Public Health research institute, VU University Medical Center, Amsterdam, The Netherlands and clinical midwife at the Department of Obstetrics and Gynecology Catharina Hospital, Eindhoven, The Netherlands. h.perdok@vumc.nl
- Doug Cronie is clinical midwife at the Department of Obstetrics and Gynecology Onze Lieve Vrouwen Gasthuis in Amsterdam, The Netherlands and researcher at the University of Maastricht, The Netherlands. d.cronie@OLVG.nl
- Cecile van der Speld is primary care midwife in Amsterdam, The Netherlands. Cecilevdspeld@gmail.com
- Jeroen Van Dillen is a Consultant Obstetrician at the Department of Obstetrics and Gynecology, Radboud University Medical Centre Nijmegen, The Netherlands. Jeroen.vandillen1@radboudumc.nl
- Ank de Jonge is associate professor at Department of Midwifery Science, AVAG, Amsterdam Public Health research institute, VU University Medical Center, Amsterdam, The Netherlands. J.dejonge1@vumc.nl researcher
- Marlies Rijnders is senior midwife researcher at TNO Department of Child Health, Leiden, The Netherlands. marlies.rijnders@tno.nl

- Irene de Graaf is Obstetrician at the Department of Obstetrics & Gynecology of the Academic Medical Center, Amsterdam, The Netherlands. i.m.degraaf@amc.uva.nl
- François Schellevis is Professor of General Practice at the Department of General Practice & Elderly Care Medicine, Amsterdam Public Health research institute, VU University Medical Center, Amsterdam, The Netherlands and Netherlands Institute for Health Services Research, Utrecht, The Netherlands. f.schellevis@nivel.nl
- Corine Verhoeven is senior midwife researcher at the Department of Midwifery Science, AVAG, Amsterdam Public Health research institute, VU University Medical Center, Amsterdam, The Netherlands and at the Department of Obstetrics and Gynecology Maxima Medical Centre, Veldhoven, The Netherlands. c.verhoeven@vumc.nl

Correspondence to author:

Hilde Perdok

Junior midwife researcher at the Department of Midwifery Science, AVAG , the Amsterdam Public Health research institute

VU University Medical Center

Van der Boechorststraat 7

1081 BT Amsterdam

The Netherlands

Acknowledgements

We gratefully thank van der Doef for her advice in this study and the professionals who participated in this study.

Conflict of interest

The authors declare that they have no competing interests

Funding

HP was supported by a grant of the Royal Dutch Organization of Midwives. The sponsor did not play a role in the collection, analysis or interpretation of the data, or in the writing of the manuscript.

ABSTRACT

Objective High levels of experienced job autonomy are found to be beneficial for healthcare professionals and for the relationship with their patients. The aim of this study was to assess how maternity care professionals in the Netherlands perceive their job autonomy in the Dutch maternity care system and whether they expect a new system of integrated maternity care to affect their experienced job autonomy.

Design A cross-sectional survey. The Leiden Quality of Work Life Questionnaire was used to assess experienced job autonomy among maternity care professionals.

Setting Data were collected in the Netherlands in 2015.

Participants 799 professionals participated of whom 362 were primary care midwives, 240 obstetricians, 93 clinical midwives and 104 obstetric nurses.

Findings The mean score for experienced job autonomy was highest for primary care midwives, followed by obstetricians, clinical midwives and obstetric nurses. Primary care midwives scored highest in expecting to lose their job autonomy in an integrated care system.

Key conclusions There are significant differences in experienced job autonomy between maternity care professionals.

Implications for practice When changing the maternity care system it will be a challenge to maintain a high level of experienced job autonomy for professionals. A decrease in job autonomy could lead to a reduction in job related wellbeing and in satisfaction with care among pregnant women.

Keywords

Maternity care professional, Job autonomy, Integrated care, Obstetrics, Midwifery

INTRODUCTION

Job related wellbeing and satisfaction is of importance both for maternity care professionals and for the women they take care of. Job autonomy, defined as the degree of control a worker has over his or her own immediate scheduling and tasks (Liu et al., 2005), is one of the conditions that influence job related wellbeing and satisfaction (Katerndahl et al., 2009). Various groups of professionals show a linear relationship between experienced job autonomy and job satisfaction (Busis et al., 2017; Jerkovic-Cosic et al., 2012; Katerndahl et al., 2009; Scheurer et al., 2009). Job autonomy is of high importance as it protects healthcare professionals against somatic complaints, psychological distress in their work, and burnout (de Jonge, 1998).

Besides the positive effects for the maternity care professional, a high level of job autonomy is shown to have a positive effect on the empowerment of women and has a positive influence on the professional-patient relationship (Walsh and Devane, 2012). This can be explained by the correlation between job-autonomy, job related stress and satisfaction of professionals, with patient satisfaction and quality of care (Forster et al., 2016).

Maternity care services are shifting the focus of care from the professional and organizational interests to the interests of women and their family (Watkins et al., 2017). Organizational changes and job uncertainty can influence job conditions such as job autonomy (Hodnett et al., 2013). As the Netherlands is in the process of changing the maternity care system, this may influence the level of experienced job autonomy of professionals. Shifting towards a system of integrated care provided by professionals

112 from multiple disciplines, will result in professionals working together in taking care of
113 women. This might possibly influence autonomous decision making of both midwives
114 and obstetricians in the Netherlands.
115
116 Like in countries such as Canada (Canadian Association of Midwives, 2010) and New
117 Zealand (Grigg and Tracy, 2013), the current maternity care system in the Netherlands
118 is characterized by risk-selection. However, in contrast to these countries, in the
119 Netherlands different professionals provide segmented perinatal maternity care.
120 Primary care midwives in the Netherlands are independent practitioners with a legally
121 defined sphere of practice and work in a community setting (Amelink-Verburg and
122 Buitendijk, 2010). Primary care midwives are responsible for risk selection and
123 autonomously provide care to women at low risk for complications during pregnancy,
124 labour and in the post-partum period. Women at low risk for complications can choose
125 to give birth either at home, in a hospital or in a birth center. At the onset of antenatal
126 care 86% of all women in the Netherlands receive midwife-led care (College Perinatale
127 Zorg, 2016; Utrecht: Perined, 2016). During pregnancy and labor, women at increased
128 risk or with a complication are referred to secondary obstetrician-led care in a hospital
129 setting. In this setting women are assisted by obstetricians, residents, clinical midwives
130 (midwives who work in a hospital setting) and obstetric nurses. At the onset of labour
131 51% of all women are in midwife-led care and approximately 29% of all births
132 eventually take place in primary midwife-led care (Utrecht: Perined, 2016).
133
134 Due to supposed relatively high perinatal mortality rates in the Netherlands (Mohangoo
135 et al., 2008) the Dutch maternity care system has become the subject of debate. It has
136 been suggested that closer collaboration between primary and secondary care would

lead to better quality of care and fewer perinatal deaths (Advies Stuurgroep zwangerschap en geboorte, 2009). Some argued that reorganizing maternity care and combining primary and secondary care into one system might result in better outcomes (Evers et al., 2010; Posthumus et al., 2013). Others pleaded for experimenting with different types of organization of care and evaluating these experiments before changing the system (Prins et al., 2014). However, although professional organizations of both obstetricians and midwives are positive regarding the integration of maternity care, and a guideline for integrated care has been published (College Perinatale Zorg, 2016), opinions differ with regard to the optimal organizational structure (Perdok et al., 2016b). A complicating factor is that historically there have been tensions between midwives and obstetricians in the Netherlands due to a power inbalance, which still plays part now. According to van der Lee et al., the establishment of professional boundaries has undermined effective teamwork and interprofessional collaboration (van der Lee et al., 2014). This has led to professionals not perceiving themselves as being equally part of a team (Lee, 2014).

Integrated care is expected to lead to a shift in professionals' tasks and responsibilities, which could affect job autonomy (Posthumus et al., 2013). For a successful implementation of integrated maternity care, it is of importance that autonomy of professionals is maintained (Perdok et al., 2016a). To evaluate the effect of new models in the maternity care system it is vital to measure experienced job autonomy in the current system. The findings are also relevant to other countries that are in the process of changing their maternity care system.

The aims of this study were to assess how maternity care professionals in the Netherlands perceive their job autonomy and whether professionals expect to lose job autonomy in a system of integrated maternity care.

METHODS

Data were used from a broad survey among professionals in maternity care including midwives, obstetricians, obstetric nurses, maternity care assistants and pediatricians. For this study we used data from obstetricians, midwives and obstetric nurses in the Netherlands. We focused on these groups because we expect a shift in these professionals' tasks and responsibilities.

Data were collected using a self-administered online questionnaire (Survey Monkey, Palo, Alto, CA, USA), from February 2015 till May 2015.
The questionnaire contained 126 questions on multiple aspects of maternity care. For the present study only the questions on demographic characteristics and perceived job autonomy were used.

In the Netherlands a total of 3,150 midwives (Netherlands Institute for Health Services Research (NIVEL), 2016), 959 obstetricians and 2,835 nurses are active in maternity care (Intelligence group, 2017). The majority of midwives, 2,231 (71%), work in primary care and 919 (29%), work as clinical midwives (Netherlands Institute for Health Services Research (NIVEL), 2016). The majority of Dutch obstetricians provide obstetric care but 298 are member of the NVOG working group perinatology and maternal diseases and have obstetrics as their main field of practice.

In order to reach an appropriate sample of primary care midwives for this study, invitations were sent by e-mail to 452 midwifery practices of whom the e-mail address could be obtained from their website of a total of 532 practices (Netherlands Institute for Health Services Research (NIVEL), 2016) in the Netherlands in 2015.
To reach obstetricians, clinical midwives and obstetric nurses an e-mail was sent to a contact person of all 91 Dutch hospitals with an obstetric department. The e-mail contained information on the study and a link to the survey. Addressees in midwifery practices and obstetric departments were asked to distribute the invitation e-mail among colleagues.
In addition to this, the Royal Dutch Organization of Midwives (KNOV) of whom 84% of all midwives are a member, placed a notification on their website asking midwives to participate in this study. There was no restriction on the number of participants per hospital or practice.

All midwifery practices and obstetric departments received a reminder by e-mail in March 2015. Only non-identifiable information was available for the researchers who analyzed the data.

Measures

Job conditions were assessed with the Leiden Quality of Work Life Questionnaire for Nurses (LQWLQ-N) developed by van der Doef (van der Doef and Maes, 1999). This questionnaire is a validated instrument to examine job satisfaction, of which "decision authority" is a characteristic, among nurses. The formulations of the questions were adjusted for maternity care professionals in consultation with the author of the instrument.

Job conditions were measured on a 4-point Likert-like scale ranging from 1 (totally disagree) to 4 (totally agree). Higher scores correlate with better job conditions. For the purpose of this study the domain "decision authority" was used to measure experienced job autonomy, which was defined as the mean of the five questions in this domain. This domain has five statements:

- I continuously have to perform tasks I am ordered to do
- In my work I am allowed to make decisions myself
- I have a say in decisions related to work
- I am free to choose when to do client related and non-client related tasks
- I am free to perform my tasks according to my own insight.

Regarding the demographic characteristics information was collected on age, number of years of work experience and the number of working hours per week.

A steering group with representatives from obstetricians, midwives, obstetric nurses, paediatricians, clients and researchers was consulted and advised on all steps during the research process.

Ethical considerations

The study was submitted to the medical ethics committee of VU University Medical Center (reference number 2014/030). Ethical approval was not considered necessary according to Dutch legislation (METc-VUmc, 2015).

Data analysis

The data were analyzed using SPSS version 24.0 (SPSS, Inc., Chicago, IL, USA). Descriptive statistics were computed and normality of the distribution of the outcome measure was examined. The scores were calculated as the mean of the items in the domain's subscale. Participants with more than one missing value within a subscale were excluded (van der Doef and Maes, 1999).

Independent ANOVA was used to examine the level of job autonomy of the professionals and their future perspective of job autonomy. A p-value of 0.05 or lower was considered statistically significant.

Multivariable linear regression analyses were performed to adjust for age, years of work experience and number of working hours per week, which might be associated with experienced job autonomy.

FINDINGS

A total of 1,896 professionals responded to the questionnaire of whom 799 completed at least four questions of the domain "decision authority". Of the 91 obstetric hospital departments who were approached, respondents came from 88 departments. The number of midwifery practices from whom midwives participated was 242 (54% of the invited practices) and all provinces were represented in our sample. Analysis of incomplete responses in SPSS showed that data were missing completely at random (MCAR).

Table 1 shows the characteristics of maternity care professionals.

In total 799 participants were included of whom 362 were primary care midwives, 93 clinical midwives, 240 obstetricians and 104 obstetric nurses.

The mean age of obstetric nurses was the highest with 46.5 years and the primary care midwives had the lowest mean age of 38.2 years. In line with this, the obstetric nurses had the longest work experience with nearly 20.7 compared to 13.1 years for primary care midwives. The obstetricians scored highest in the mean number of working hours with 47.2 hours of work per week.

In Table 2 the experienced job autonomy scores are presented for the different maternity care professionals. Adjustment for age, number of years of work experience and number of working hours per week showed minor changes in the regression coefficients compared to the bivariable analysis. Primary care midwives had a significantly higher score (mean 2.94 on a 4-point scale) for experienced job autonomy compared to obstetricians (mean 2.73), clinical midwives (mean 2.70) and obstetric nurses (2.61).

Table 3 shows the item (statement) means and total subscale score of experienced job autonomy for the different professionals. The lowest score given by all professionals was for the statement "I am free to choose when to do client related and non-client related tasks".

In table 4 the scores for the statement "In the future I expect to lose autonomy" are presented. Primary care midwives scored highest (mean 2.43), followed by obstetric nurses (mean 2.06), obstetricians (mean 1.99) and clinical midwives (mean 1.92).

DISCUSSION

In our study, which relates to the current model of midwifery care in the Netherlands, primary care midwives had a significantly higher score for job autonomy compared to obstetricians, clinical midwives and obstetric nurses. Primary care midwives also scored highest with regards to their future perspective of losing job autonomy, in a system of integrated maternity care.

Literature suggests that working outside a hospital setting is related to higher job satisfaction, primarily due to higher experienced job autonomy (McCourt et al., 2014a; McCourt et al., 2014b; Pron, 2013). This is in line with our study, which shows that self-employed primary care midwives, who work outside the hospital, experienced the highest level of job autonomy. This corresponds with specialists in the Netherlands who are self-employed (mostly peripheral hospitals) experiencing a higher level of job-autonomy compared to specialists employed by hospitals (mostly academic hospitals) (Hugen, 2016).

In the current system primary care midwives score highest in expecting to lose job autonomy in a new, integrated maternity care system. This is in contrast to clinical midwives who have a lower expectation to lose their job autonomy. An explanation for this could be that, since clinical midwives already work under the supervision of an obstetrician in the current system, they do not expect much change in job autonomy. Surprisingly, the obstetric nurses who also work under supervision, score second highest in the expectation to lose their job autonomy. This could be caused by the fact that nurses seem to be highly satisfied with their job, and they generally attributed this

satisfaction to the autonomy they were granted through delegation of tasks (meaning an intentional transfer of clinical tasks from one professional to another healthcare professional). (Riisgaard et al., 2016). Possibly, their expectation to lose job autonomy is caused by their expectation of a change in task delegation.

The obstetricians, clinical midwives and nurses in our study scored lower on experienced job autonomy compared to the primary care midwife. This could be caused by the widespread use of protocols and a more prescriptive form of maternity care in hospitals leading to a more regulated form of practice (Coyle et al., 2001).

Even though there were differences in experienced job autonomy between the professionals, in our study all professionals scored at least 2.7 on a scale of 4. A sense of job autonomy is of importance for professionals themselves as it can protect them from burnout (de Jonge, 1998). As well as this, a higher sense of job autonomy among midwives in midwife-led care settings is shown to have a positive effect on the empowerment of women and has a positive influence on the professional-patient relationship (Walsh and Devane, 2012).
Therefore, care must be taken to maintain a high level of job autonomy amongst all professionals when moving to a system of integrated maternity care.

Successful implementation of new staffing models requires fulfillment of certain preconditions. One of these conditions is that staff must be empowered and supported to establish their own ways of working which can increase professional autonomy (NHS National maternity review report, 2016). One example of a successful, alternative model is a self-directed nursing service “Buurtzorg” (neighbourhood care) in the Netherlands,

which provides patient-centered home care. Under this model the organization values professional autonomy and delivers care through small local self-managing nursing teams. Buurtzorg clients appreciate the consistent, compassionate and autonomous care. This is reflected in the high levels of satisfaction in national surveys (Kreitzer et al., 2015). A recent study among nursing staff confirms that a higher degree of self-direction (self-perceived autonomy over patient care) leads to higher satisfaction (Maurits et al., 2017). Another example is caseload midwifery, as a model of care in which childbearing women receive their ante-, intra- and postnatal care from one midwife, which leads to higher levels of experienced autonomy and increased job satisfaction among professionals (Edmondson and Walker, 2014). As well as this caseload midwifery increases women's satisfaction with antenatal, intrapartum and postpartum care (Forster et al., 2016).

Although it is shown that job autonomy is of importance in different maternity care systems (Forster et al., 2016; Lavender and Chapple, 2004), there seems to be tension between job autonomy and collaboration between professionals (van der Lee et al., 2016). Literature shows that good collaboration of maternity care professionals, improves the quality of care (Hunter et al., 2008). Therefore, the challenge lies in finding the balance between maintaining a high level of job autonomy among professionals and good collaboration between professionals based on the needs of women. Lack of clear a definition, consensus and coordination between practitioners, researchers and policy leaders in relation to the concept of collaboration (Perdok et al., 2014; Perdok et al., 2016a) adds to the challenge of finding this balance.

355

356 **Strengths and limitations**

357 A strength of this study is that different maternity care professionals were included
358 whereas most studies focus on only one professional group (Pron, 2013). In addition,
359 we received responses from the majority of primary care midwifery practices and
360 hospitals with an obstetric department, therefore giving a reliable picture of the views of
361 professionals.
362 A limitation of this study is that the exact response rate of the participants cannot be
363 established due to the method of (snowball) sampling. Midwifery practices and obstetric
364 departments were invited by e-mail. Individuals did not receive a personalized link to
365 the survey and therefore no information could be traced back from the respondents. In
366 addition with the anonymity of the respondents, no information is available on the non-
367 respondents and possible selection bias. Due to snowball-sampling the distribution of
368 the recruitment e-mail depended on the willingness of the person who was responsible
369 for the practices' e-mail. However, this was mitigated by the invitations on the
370 professional groups' websites to participate.

371

372

373 Furthermore, the LQWLQ was validated to measure overall job-satisfaction among
374 nurses whereas we limited our research to the domain of job autonomy for all maternity
375 care professionals. As the LQWLQ does include the characteristic decision-authority, we
376 consider this a reliable instrument for our study.
377 Future research considering individual elements of job satisfaction may examine a
378 separate validation of each the domains within the questionnaire.

379

More research is needed to explore how to optimize collaboration between professionals in order to improve the quality of maternity care and maintain the high level of job satisfaction.

CONCLUSIONS

This study shows that there is a significant difference in experienced job autonomy between maternity care professionals. Primary care midwives working in the community experienced the highest level of job autonomy and scored highest in expecting to lose their job autonomy in an integrated maternity care system. Since a decrease in job autonomy could have a negative impact on job related wellbeing and satisfaction among professionals and the women for whom they care, the challenge is to maintain a high level of experienced job autonomy when changing the maternity care system. Further research is needed to evaluate experienced job autonomy in a system of integrated maternity care and its effect on the wellbeing of professionals involved as well as on patient care.

Author's Contributions

HP, DC, AdJ and CV designed the study. HP and CvdS collected the data. HP and CvdS performed the analyses. HP drafted the article. DC, CvdS, JvD, AdJ, MR, IdG, FS and CV revised the article critically. All authors read and approved the final manuscript.

Table 1. Characteristics of participating maternity care professionals

	Total population n = 799 (100%)	Primary care midwives n = 362 (45.3%)	Obstetricians n = 240 (30.0%)	Clinical Midwives n = 93 (11.6%)	Obstetric nurses n = 104 (13.1%)
Age in years Mean (SD)	41.5 (10.68)	38.2 (10.65)	44.1 (10.01)	42.1 (9.66)	46.5 (9.63)
Years of work experience Mean (SD)	14.7 (9.60)	13.1 (8.96)	14.0 (9.96)	16.3 (8.91)	20.7 (9.02)
Working hours/week (SD)	40.6 (14.00)	43.4 (14.84)	47.2 (9.85)	28.8 (5.53)	26.3 (5.66)

Table 2. Experienced job autonomy scores by professional group (means (±SD) and adjusted means with 95% Confidence Interval (CI))

	Experienced autonomy Mean (SD)	Experienced autonomy Adjusted mean* (95% CI)
Primary care midwives (n=362)	3.07 (0.40)	2.94 (2.77-3.11)
Obstetricians (n= 240)	2.88 (0.37)	2.73 (2.53-2.92)
Clinical midwives (n= 93)	2.82 (0.39)	2.70 (2.53-2.88)
Obstetric nurses (n=104)	2.73 (0.38)	2.61 (2.44-2.79)

Mean score (1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree)

* Adjusted for age, work experience, working hours per week

Table 3. Item and total subscale scores of experienced job autonomy (means and SD)

	Primary care midwives n=362	Obstetricians n=240	Clinical midwives n= 93	Obstetric nurses n=104
I continuously have to perform tasks that I am ordered to do*	3.10 (0.56)	3.15 (0.50)	3.00 (0.44)	2.84 (0.58)
In my work I am allowed to make decisions myself	3.20 (0.53)	3.27 (0.49)	3.11 (0.50)	2.96 (0.42)
I have a say in decisions related to work	3.16 (0.56)	3.22 (0.46)	2.97 (0.60)	2.86 (0.53)
I am free to choose when to do client related and non-client related tasks	2.85 (0.67)	2.11 (0.69)	2.25 (0.64)	2.22 (0.61)
I am free to perform my tasks according to my own insight.	3.04 (0.53)	2.65 (0.62)	2.78 (0.57)	2.74 (0.48)
Total scale score	3.07 (0.40)	2.88 (0.37)	2.82 (0.39)	2.73 (0.38)

Mean score (1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree)

* For analysis the score for this negatively formulated question was reversed.

Table 4. Scores on questionnaire item "Future perspective: I expect to lose autonomy in an integrated care system" by professional group (means (±SD) and adjusted means with 95% Confidence Interval (CI))

	Mean (SD)	Adjusted mean* (95% CI)
Primary care midwives (n=362)	2.61 (0.78)	2.43 (2.13-2.73)
Obstetricians (n=240)	2.19 (0.64)	1.99(1.65-2.34)
Clinical midwives (n= 93)	2.11 (0.64)	1.92 (1.61-2.22)
Obstetric nurses (n=104)	2.30 (0.50)	2.06 (1.76-2.38)

Mean score (1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree)
* Adjusted for age, work experience, working hours per week

References

Advies Stuurgroep zwangerschap en geboorte, 2009. Een goed begin: veilige zorg rond zwangerschap en geboorte.

Amelink-Verburg, M.P., Buitendijk, S.E., 2010. Pregnancy and labour in the Dutch maternity care system: what is normal? The role division between midwives and obstetricians. Journal of midwifery & women's health 55, 216-25.

Busis, N.A., Shanafelt, T.D., Keran, C.M., Levin, K.H., Schwarz, H.B., Molano, J.R., Vidic, T.R., Kass, J.S., Miyasaki, J.M., Sloan, J.A., Cascino, T.L., 2017. Burnout, career satisfaction, and well-being among US neurologists in 2016. Neurology 88, 797-808.

Canadian Association of Midwives, 2010. Position statement. Midwifery care and normal birth. http://www.canadianmidwives.org/DATA/DOCUMENT/CAM_ENG_Midwifery_Care_Normal_Birth_FINAL_Nov_2010.pdf. Accessed 01/12 2016.

College Perinatale Zorg, 2016. Zorgstandaard Integrale Geboortezorg. https://www.zorginzicht.nl/bibliotheek/integrale-geboortezorg-zorgstandaard/RegisterKwaliteitsstandaardenDocumenten/Zorgstandaard_Integrale_Geboortezorg_versie_1_1.pdf. Accessed 2/28 2017.

Coyle, K.L., Hauck, Y., Percival, P., Kristjanson, L.J., 2001. Ongoing relationships with a personal focus: mothers' perceptions of birth centre versus hospital care. Midwifery 17, 171-81.

de Jonge, J.,WB, 1998. Job characteristics and employee well-being: a test of Warr's Vitamin Model in health care workers using structural equation modelling. 19, 387-407.

Edmondson, M.C., Walker, S.B., 2014. Working in caseload midwifery care: the experience of midwives working in a birth centre in North Queensland. Women and birth : journal of the Australian College of Midwives 27, 31-6.

Evers, A.C., Brouwers, H.A., Hukkelhoven, C.W., Nikkels, P.G., Boon, J., van Egmond-Linden, A., Hillegersberg, J., Snuif, Y.S., Sterken-Hooisma, S., Bruinse, H.W., Kwee, A., 2010. Perinatal mortality and severe morbidity in low and high risk term pregnancies in the Netherlands: prospective cohort study. BMJ (Clinical research ed.) 341, c5639.

Forster, D.A., McLachlan, H.L., Davey, M.A., Biro, M.A., Farrell, T., Gold, L., Flood, M., Shafiei, T., Waldenstrom, U., 2016. Continuity of care by a primary midwife (caseload midwifery) increases women's satisfaction with antenatal, intrapartum and postpartum care: results from the COSMOS randomised controlled trial. BMC pregnancy and childbirth 16, 28,016-0798-y.

Grigg, C.P., Tracy, S.K., 2013. New Zealand's unique maternity system. Women and birth : journal of the Australian College of Midwives 26, e59-64.

Hodnett, E.D., Gates, S., Hofmeyr, G.J., Sakala, C., 2013. Continuous support for women during childbirth. The Cochrane database of systematic reviews 7, CD003766.

Hugen, B., 2016. Van autonomie naar zeggenschap. https://www.erasmuscentrumzorgbestuur.nl/dynamic/media/24/documents/bart_hugenthesis.pdf. Accessed 6/11 2017.

Hunter, B., Berg, M., Lundgren, I., Olafsdottir, O.A., Kirkham, M., 2008. Relationships: The hidden threads in the tapestry of maternity care. Midwifery 24, 132-7.

Intelligence group, 2017. De arbeidsmakt van O&G verpleegkundigen in beweging 2012. https://www.intelligence-group.nl/nieuws/april-2012/De-arbeidsmarkt-van-O-en-G-verpleegkundigen-in-beweging. Accessed 1/19 2017.

Jerkovic-Cosic, K., van Offenbeek, M.A., van der Schans, C.P., 2012. Job satisfaction and job content in Dutch dental hygienists. International journal of dental hygiene 10, 155-62.

Katerndahl, D., Parchman, M., Wood, R., 2009. Perceived complexity of care, perceived autonomy, and career satisfaction among primary care physicians. Journal of the American Board of Family Medicine : JABFM 22, 24-33.

Kreitzer, M.J., Monsen, K.A., Nandram, S., de Blok, J., 2015. Buurtzorg nederland: a global model of social innovation, change, and whole-systems healing. Global advances in health and medicine : improving healthcare outcomes worldwide 4, 40-4.

Lavender, T., Chapple, J., 2004. An exploration of midwives' views of the current system of maternity care in England. Midwifery 20, 324-34.

Lee, v.d.N., 2014. Tailoring CanMEDS for training in Obstetrics and Gynaecology in the Netherlands.

Liu, C., E. Spector, P., M. Jex, S., 2005. The relation of job control with job strains: A comparison of multiple data sources. Journal of Occupational and Organizational Psychology 78, 325-36.

Maurits, E.E., De Veer, A.J., Groenewegen, P.P., Francke, A.L., 2017. Home-care nursing staff in self-directed teams are more satisfied with their job and feel they have more autonomy over patient care: A nationwide survey. Journal of advanced nursing .

McCourt, C., Rayment, J., Rance, S., Sandall, J., 2014a.

McCourt, C., Rayment, J., Rance, S., Sandall, J., 2014b. **An ethnographic organisational study of alongside midwifery units: a follow-on study from the Birthplace in England programme.**.

METc-VUmc, 2015. Beslisboom WMO-plichtigheid. www.vumc.nl/afdelingen-themas/nietwmobeslisboom.pdf. Accessed 05/18 2016.

Mohangoo, A.D., Buitendijk, S.E., Hukkelhoven, C.W., Ravelli, A.C., Rijninks-van Driel, G.C., Tamminga, P., Nijhuis, J.G., 2008. Higher perinatal mortality in The Netherlands than in other European countries: the Peristat-II study. Nederlands tijdschrift voor geneeskunde 152, 2718-27.

Netherlands Institute for Health Services Research (NIVEL), 2016.

Registration of midwives 2015 verloskunde-academie.nl/wp-content/uploads/2016/02/Cijfers-uit-de-registratie-van-verloskundigen-peiling-jan-2015.pdf. Accessed 1/25 2017.

NHS National maternity review report, 2016. Better births: improving outcomes of maternity services in England. https://www.england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf. Accessed 1/19 2017.

Perdok, H., Jans, S., Verhoeven, C., Henneman, L., Wiegers, T., Mol, B.W., Schellevis, F., de Jonge, A., 2016a. Opinions of maternity care professionals and other stakeholders about integration of maternity care: a qualitative study in the Netherlands. BMC pregnancy and childbirth 16, 188,016-0975-z.

Perdok, H., Mokkink, L., van, D.J., Westerneng, M., Jans, S., Mol, B.W., de, J.A., 2014. Opinions of maternity care professionals about integration of care during labor for "moderate risk" indications: a Delphi study in the Netherlands. Birth (Berkeley, Calif.) 41, 195-205.

Perdok, H., Jans, S., Verhoeven, C., van Dillen, J., Batenburg, R., Mol, B.W., Schellevis, F., de Jonge, A., 2016b. Opinions of professionals about integrating midwife- and obstetrician-led care in The Netherlands. Midwifery 37, 9-18.

Posthumus, A.G., Scholmerich, V.L., Waelput, A.J., Vos, A.A., De Jong-Potjer, L.C., Bakker, R., Bonsel, G.J., Groenewegen, P., Steegers, E.A., Denktas, S., 2013. Bridging between professionals in perinatal care: towards shared care in the Netherlands. Maternal and child health journal 17, 1981-9.

Prins, M., van Dillen, J., de Jonge, A., 2014. Advantages of midwife-led continuity model of care

 . PMID:25017977 157, A7070.

Pron, A.L., 2013. Job satisfaction and perceived autonomy for nurse practitioners working in nurse-managed health centers. Journal of the American Association of Nurse Practitioners 25, 213-21.

Riisgaard, H., Nexoe, J., Le, J.V., Sondergaard, J., Ledderer, L., 2016. Relations between task delegation and job satisfaction in general practice: a systematic literature review. BMC family practice 17, 168.

530 Scheurer, D., McKean, S., Miller, J., Wetterneck, T., 2009. U.S. physician satisfaction: a systematic
531 review. Journal of hospital medicine 4, 560-8.

532 Utrecht: Perined, 2., 2016.
Perined. Perinatale Zorg in Nederland 2015 assets.perined.nl.
533 Accessed 1/25 2017.

534 van der Doef, M., Maes, S., 1999. The Leiden Quality of Work Questionnaire: its construction, factor
535 structure, and psychometric qualities. Psychological reports 85, 954-62.

536 van der Lee, N., Driessen, E.W., Houwaart, E.S., Caccia, N.C., Scheele, F., 2014. An examination of
537 the historical context of interprofessional collaboration in Dutch obstetrical care. Journal of
538 interprofessional care 28, 123-7.

539 van der Lee, N., Driessen, E.W., Scheele, F., 2016. How the past influences interprofessional
540 collaboration between obstetricians and midwives in the Netherlands: Findings from a secondary
541 analysis. Journal of interprofessional care 30, 71-6.

542 Walsh, D., Devane, D., 2012. A metasynthesis of midwife-led care. Qualitative health research 22,
543 897-910.

544 Watkins, V., Nagle, C., Kent, B., Hutchinson, A.M., 2017. Labouring Together: collaborative
545 alliances in maternity care in Victoria, Australia-protocol of a mixed-methods study. BMJ open 7,
546 e014262,2016-014262.

547